Date: Thu, 28 Oct 93 04:30:47 PDT

From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>

Errors-To: Ham-Space-Errors@UCSD.Edu

Reply-To: Ham-Space@UCSD.Edu

Precedence: Bulk

Subject: Ham-Space Digest V93 #69

To: Ham-Space

Ham-Space Digest Thu, 28 Oct 93 Volume 93 : Issue 69

Today's Topics:

Does PG_AEA really work? I am having problems SAREX Keps & Update: 10/26/93 STS-58 SAREX signal strength (2 msgs)

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 28 Oct 93 01:44:39 GMT From: world!eac@uunet.uu.net

Subject: Does PG_AEA really work? I am having problems

To: ham-space@ucsd.edu

Hello All,

Has anyone got the PG_AEA program to work? I tried to upload about 144k file and it exhibits some problems. I am using it on com2 at 19200.

Symptoms:

- 1. It sends two bytes of the 144k *.out file and then says "waiting for final handshake". The satellite gives back a -7 (No PFH) error.
- 2. The program immediately starts to connect to the satellite. If it does not connect (I get a disconnect message) than it does not do anything. I found out that F8 and F9 cause status displays when pressed. It stays in disconnected mode even when it gets open commands and there are files to upload. I have to exit and re-run the program.

A general comment is that I wish that there was more information displayed. I do not like programs that run without showing what the satellite is beaconing and what the program was doing.

73 Eric wb1hbu@amsat.org @K023 @U022

Date: Tue, 26 Oct 1993 21:17:18 -0600

From: swrinde!cs.utexas.edu!math.ohio-state.edu!cyber2.cyberstore.ca!

nntp.cs.ubc.ca!alberta!adec23!ve6mgs!usenet@network.ucsd.edu

Subject: SAREX Keps & Update: 10/26/93

To: ham-space@ucsd.edu

SB SAREX @ AMSAT \$STS-58.024 SAREX Keps & Update: 10/26/93

The extremely successful school group contacts have cleared three school group backup passes for possible general QSO opportunities. While the SAREX Working Group cannot fully guarantee availability, there is a high probability that the STS-58 crew will be ready and waiting to take general calls over the continental U.S. on these passes. These opportunities include passes on orbit 145 at MET 9 days 0 hours 6 minutes (10/27 at 14:59 UTC), orbit 178 at MET 11 days 1 hour 42 minutes (10/29 at 16:35 UTC) and orbit 192 at MET 11 days 22 hours and 29 minutes (10/30 at 13:22 UTC).

School group highlights today include two horizon-to-horizon opportunities for the Lycee Gaston Febus school in Pau, France, where 15 questions were answered, and the St. Barnabas Episcopal School in Houston, Texas where 12 questions were answered. During the French contact, one student asked Shuttle pilot Rick Searfoss, KC5CKM, if the crew could see satellites from space. Rick explained that indeed they could. He stated that during this mission they have had visual sightings of the Russian Space Station MIR and NASA's Gamma Ray Observatory. The Gamma Ray Observatory was built by TRW for the NASA Goddard Space Flight Center and was lofted into orbit on the STS-37 mission. (STS-37 was the first mission with an entire crew of ham radio operators--Ken Cameron, Jay Apt, Linda Godwin, Steve Nagel & Jerry Ross).

Hams across the U.S. and around the world have been working the Shuttle Columbia on both voice and packet. This morning's voice pass over the U.S. had both Bill McArthur, KC5ACR and Marty Fettman, KC5AXA, firing off callsigns in classic DX pileup style. General QSO operations thus far can be summed up with one word---outstanding. The SAREX team wishes all of you the best of luck in your endeavor to work the shuttle.

Gil Carman of the Johnson Space Center compared a recent state vector to

element set GSFC-025 and found only a two second difference. Therefore, there will be no new SAREX element set released today. GSFC-025, generated by Ron Parise, WA4SIR is provided below for those who did not receive it yesterday.

STS-58

1 22869U 93065A 93298.61712570 0.00112657 77536-5 20892-3 0 259 2 22869 39.0200 82.4277 0014476 28.5134 331.6466 16.00068904 1136

Satellite: STS-58 Catalog number: 22869

Epoch time: 93298.61712570 (25 OCT 93 14:48:39.66 UTC)

Element set: GSFC-025

Inclination: 39.0200 deg

RA of node: 82.4277 deg Space Shuttle Flight STS-58

Eccentricity: 0.0014476 Keplerian Elements

Arg of perigee: 28.5134 deg Mean anomaly: 331.6466 deg

Mean motion: 16.00068904 rev/day Semi-major Axis: 6652.3600 Km Decay rate: 0.11E-02 rev/day*2 Apogee Alt: 283.60 Km Epoch rev: 113 Perigee Alt: 264.34 Km

NOTE - This element set is based on NORAD element set # 025.

The spacecraft has been propagated to the next ascending node, and the orbit number has been adjusted to bring it into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

/EX

Date: Tue, 26 Oct 1993 16:14:30 GMT

From: ftpbox!mothost!lmpsbbs!news@uunet.uu.net

Subject: STS-58 SAREX signal strength

To: ham-space@ucsd.edu

In article 2CCD101C@su19f.ess.harris.com, jhobson@su19f.ess.harris.com (Harv Hobson) writes:

}In article <2ahfa0\$qj8@access.digex.net> cormackj@access.digex.net (John Cormack)
writes:

Has anyone

}ever worked the Shuttle using other than high power and directional
}antennas?
}

}Harv

I have worked them from my mobile, which admitedly high power at 100 watts. I was using a 5/8th vertical. I didn't need the power, but being the rig is a commercial unit, I am locked in at that power level. The received signal strength was several microvolts.

Bruce, WB4YUC, el YUCCO. . .

Date: 27 Oct 1993 10:50:54 GMT

From: spool.mu.edu!olivea!inews.intel.com!ilx018-bb.intel.com!ilx049!

dbraun@uunet.uu.net

Subject: STS-58 SAREX signal strength

To: ham-space@ucsd.edu

Myself, I've been able to receive SAREX packets from almost every pass with a DJ-580 and a dipole on my roof. But I haven't been able to connect, no matter how much I try, even when nobody else is connected. (Being in a small country surrounded by ocean and desert helps here....) If any of you have made a successful QSO, could you tell me what your setup was, and how much power was necessary?

- -

Doug Braun Intel Israel, Ltd. M/S: IDC1-41

Tel: 011-972-4-655069 dbraun@inside.intel.com
